

XYPEX BIO-SAN C500

Infosafe No.: LQBTE
ISSUED Date : 06/07/2023
ISSUED by: Concrete Waterproofing
Manufacturing Pty Ltd

Section 1 - Identification

Product Identifier

XYPEX BIO-SAN C500

Company Name

Concrete Waterproofing Manufacturing Pty Ltd

Address

76 Merkel Street Thurgoona
NSW 2640 AUSTRALIA

Telephone/Fax Number

Tel: 02 6040 2444

Emergency Phone Number

0418 479 448 (9 - 5pm)

Recommended use of the chemical and restrictions on use

Waterproofing and protection of concrete.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Skin corrosion/irritation: Category 2

Eye damage/irritation: Category 1

Sensitisation - skin: Category 1

Carcinogenicity: Category 1A

Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure): Category 2

Hazardous to the Aquatic Environment - Acute Hazard: Category 1

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1

Signal Word (s)

DANGER

Hazard Statement (s)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H350 May cause cancer by inhalation.

H373 May cause damage to organs respiratory organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark, Corrosion, Health hazard, Environment



Precautionary Statement – Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement – Response

- P302+P352 IF ON SKIN: Wash with plenty of water.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P391 Collect spillage.

Precautionary Statement – Storage

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Precautionary Statement – Disposal

- P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Ferric Oxide	1309-37-1	45-55 %
Portland cement	65997-15-1	10-15 %
copper(II) oxide	1317-38-0	5-7 %
Quartz respirable fraction	14808-60-7	<1 %
Ingredients determined not to be hazardous		Balance

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Use appropriate fire extinguisher for surrounding environment.

Hazards from Combustion Products

Non combustible material.

Specific hazards arising from the chemical

This product is non combustible. However heating can cause expansion or decomposition leading to violent rupture of containers.

Decomposition Temperature

Alkaline earth compounds: 580°C

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

Section 6 - Accidental Release Measures

Emergency Procedures

Increase ventilation. Evacuate all unprotected personnel. Always wear full protective equipment as referred to under Section 8 to prevent any contamination of skin, eyes, respiratory system and personal clothing. Keep the material dry if possible. When the product is in a dry state, avoid airborne dust generation when cleaning up. Use vacuum cleaner (Industrial portable units), equipped with high efficiency particulate filters (HEPA filter) or equivalent technique, and transfer material to a suitable container. OR Wipe up the dust by mopping, wet brushing or water sprays or hoses with a fine mist to avoid the dust becoming airborne and remove slurry. If the product has become wet, clean up and place in watertight container. Allow material to dry and solidify before disposal. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Avoid mishandling of pails of bags so as to prevent accidental bursting and creation of dust. Use handling equipment and controls if necessary to avoid injury.

Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Store in a dry place. Protect from moisture.

Store this product in a draught free environment, clear of the ground, avoiding humid conditions and extremes of temperature (minimum lower temperature of 7°C).

Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

The product should be used within 12 months of the date of production; product should not have been exposed to the atmosphere prior to use.

Storage Temperatures

Avoid storage temperatures below 7°C.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Crystalline silica (quartz) (respirable dust)

TWA: 0.05 mg/m³

Notice: Carc.1A

Portland cement (inspirable dust)

TWA: 10 mg/m³

Copper Oxide (copper fume)

TWA: 0.2 mg/m³

Iron oxide fume (Fe₂O₃) (as Fe)

TWA: 5 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Carc.1A: Known to have carcinogenic potential for humans.

Source: Safe Work Australia.

Biological Monitoring

No biological limits allocated.

Control Banding

Not available

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter (class P1 or P2 particulate) should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious, abrasion and alkali resistant material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards

No further relevant information available.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Powder	Appearance	Brown particulate powder
Colour	Brown	Odour	Odourless
Melting Point	Not applicable	Boiling Point	Not applicable
Decomposition Temperature	Alkaline earth compounds: 580°C	Solubility in Water	Powder forms slurry with water, hardens over time
Specific Gravity	2.0 to 2.8 (water = 1)	pH	9.1-9.8 (EPA method 2 parts water to 1 part powder by volume)
Vapour Pressure	Not applicable	Relative Vapour Density (Air=1)	Not applicable
Evaporation Rate	Not applicable	Coefficient Water/Oil Distr.	Not available
Odour Threshold	Not available	Viscosity	Not applicable
Partition Coefficient: n-octanol/water (log value)	Not available	Flash Point	Not applicable
Flammability	Non combustible	Auto-Ignition Temperature	Not applicable
Explosion Limit - Upper	Not applicable	Explosion Limit - Lower	Not applicable

Section 10 - Stability and Reactivity

Chemical Stability

The product is chemically stable. When mixed with water it will harden, with time, into a stable mass. Products may liberate carbon monoxide or carbon dioxide.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Avoid humid and drafty environments during storage. Also avoid storage temperatures below 7°C.

Incompatible Materials

It should be noted that the uncontrolled use of aluminium powder in wet cement should be avoided as hydrogen is produced.

Hazardous Decomposition Products

Not available

Reactivity and Stability

Alkaline earth compounds react vigorously with strong acids. Powder forms slurry with water, hardens over time. It should be noted that the uncontrolled use of aluminium powder in wet cement should be avoided as hydrogen is produced.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Toxicology Information

The cement incorporated with the other ingredients in this product has been subject to a Limit test.

Acute Toxicity - Dermal

Limit test, rabbit, 24 hours contact, 2,000 mg/kg body weight – no lethality.

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

May cause respiratory irritation. Inhalation of product dust can cause irritation of the nose, throat and respiratory system. Can burn the throat and respiratory tract. Coughing, sneezing and shortness of breath may occur following exposures in excess of occupational exposure limits. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

Repeated exposure to respirable crystalline silica dust may lead to silicosis, or other serious delayed lung injury. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill-health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased, and may also lead to other diseases including heart disease and scleroderma.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis. May cause an allergic skin reaction.

When skin is exposed to the product in its dry or wet state, thickening, cracking or fissuring of the skin may occur. Prolonged contact in combination with abrasion can cause severe burns.

Cement may have an irritating effect on moist skin (due to transpiration of humidity) after prolonged contact. Prolonged skin contact with wet cement or fresh concrete may cause serious burns because they develop without pain being felt. Repeated skin contact with wet cement may cause dermatitis.

Eye

Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness. Direct contact either in dry or wet form may cause effects ranging from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns or blindness.

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

May cause an allergic skin reaction.

This product contains Portland cement which is classified as a skin sensitizer.

Some individuals may exhibit eczema upon exposure to wet cementitious products, caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of those two mechanisms. An exact diagnosis is often difficult to assess.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

May cause cancer by inhalation. Classified as a Known or presumed human carcinogen.

May cause cancer by inhalation. Respirable crystalline silica is classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans by inhalation (Group 1).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

May cause respiratory irritation.

STOT - Repeated Exposure

May cause damage to organs respiratory organs through prolonged or repeated exposure.

Aspiration Hazard

Not expected to be an aspiration hazard.

Section 12 - Ecological Information

Ecotoxicity

Very toxic to aquatic life with long lasting effects. Alkaline conditions may also have effects on vegetation.

Persistence and degradability

Alkaline earth material is non bio-degradable; it reacts with atmosphere and dissolved carbon dioxide to form calcium carbonate (chalk).

Mobility

Not available

Bioaccumulative Potential

None of the substances in this mixture are known to bioaccumulate .

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish

LC50 (Rainbow trout) 0.0207 mg/l/96h

Acute Toxicity - Daphnia

LC50 (Flea) 0.45 mg/l/48h

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

To minimise personal exposure to the chemical, refer to Section 8—Exposure controls and personal protection.

Product – Unused Residue or Dry Spillage

Pick up dry and put in containers. Mark container clearly. In case of disposal, harden with water to avoid dust creation. Dispose of at a licensed waste facility. Dispose of all materials in accordance with current local regulations/legislation.

Product – After Addition of Water, Hardened

Dispose of at a licensed waste facility accepting cementitious and alkaline earth based waste. Dispose of all materials in accordance with current regulations/legislation. Avoid entry into sewage and drainage systems or into bodies of water.

Packaging

Completely empty packaging and process it according to current regulations/legislation. Do not reuse or refill container. Offer for recycling if available or reconditioning if appropriate or place in trash.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG Code):

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

This product complies with the requirements of Special Provision AU01 and is therefore exempted from being classified as Dangerous Goods according to the ADG Code.

Note: Special Provision AU01:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No.: 3077

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains Copper Oxide)(MARINE POLLUTANT)

DG Class: 9

Packaging Group: III

EMS No.: F-A, S-F

Special provisions: 274, 335, 966, 967, 969

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 3077

Proper Shipping Name: : Environmentally hazardous substance, solid, n.o.s.(Contains Copper Oxide)

Class: 9

Packing Group: III

Label: Miscellaneous

Packaging Instructions (passenger & cargo): 956

Packaging Instructions (cargo only): 956

Special provisions: A97, A158, A179, A197, A215

ADG U.N. Number

None Allocated

ADG Proper Shipping Name

None Allocated

ADG Transport Hazard Class

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

Yes

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

Not Scheduled

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

Agricultural and Veterinary Chemicals Act 1994

Not available

Basel Convention

Not available

Section 16 - Any Other Relevant Information

Date of Preparation

SDS created: July 2023

Version Number

1.0

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.
Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Code of Practice for Supply Diversion into Illicit Drug Manufacture.
National Code of Practice for Chemicals of Security Concern.
Agricultural Compounds and Veterinary Chemicals Act.
International Agency for Research on Cancer (IARC) Monographs.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
International Air Transport Association (IATA) Dangerous Goods Regulations.
International Maritime Dangerous Goods (IMDG) Code.
Workplace exposure standards for airborne contaminants.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).
Globally Harmonised System of Classification and Labelling of Chemicals. (7th revised edition)
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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